

AMENDMENTS TO THE CLAIMS

1. (Original) A method in a computer system for determining a diameter of a broadcast channel, the broadcast channel having computers, each computer connected to at least three neighbor computers, the method comprising:

- receiving a message from a neighbor computer;
- identifying a distance traveled from the received message;
- setting an estimated diameter based on the identified distance traveled amount;
- incrementing the distance traveled in the message; and
- sending the message with the incremented distance traveled to a neighbor

computer.

2. (Original) The method of claim 1 wherein the setting of the estimated diameter sets the estimated diameter to the distance traveled whenever the identified distance traveled is greater than the current estimated diameter.

3. (Original) The method of claim 1 wherein the computers of the broadcast channel form an m-regular and m-connected graph.

4. (Original) The method of claim 3 wherein m is 4.

5. (Currently Amended) The method of claim 1 wherein each computer is connected to its neighbor computers via a via point-to-point connections.

6. (Currently Amended) The method of claim 1 including when the estimated diameter is set, broadcasting a message indicating the a new estimated diameter.

7. (Original) The method of claim 1 including:

receiving a message indicating a new estimated diameter; and
when the new estimated diameter is greater than the currently estimated diameter,
setting the estimated diameter to the new estimated diameter.

8. (Original) The method of claim 1 including:

receiving a message indicated to reset the estimated diameter to a new estimated
diameter; and
setting the estimated diameter to the new estimated diameter.

9-30. (Canceled)